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# **Does growth in private schooling contribute to Education for All? Evidence from a longitudinal, two cohort study in Andhra Pradesh, India**

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## **Abstract**

*This paper informs debates about the potential role for low-fee private schooling in achieving Education for All goals in India. It reports Young Lives' longitudinal data for two cohorts (2,906 children) in the state of Andhra Pradesh. Eight year olds uptake of private schooling increased from 24 per cent (children born in 1994-5) to 44 per cent (children born in 2001-2). Children from rural areas, lower socioeconomic backgrounds and girls continue to be under represented. While some access gaps decreased, the gender gap seems to be widening. Evidence on risks to equity strengthen the case for an effectively regulated private sector, along with reforms to government sector schools.*

## **Keywords**

Access to education, Private schools, Education for all, School choice, Equity, Gender, India

## 1. Introduction

Goal 2 of Education for All (EFA) aims to ensure that by 2015 all children, particularly girls and those from ethnic minorities or difficult circumstances are able to access and complete free and compulsory primary education of good quality. The Millennium Development Goals similarly aim for 'universal primary education' (UPE) by 2015. However, despite good progress toward the achievement of this goal 'many of the poorest countries are struggling to reach universal primary education' (UNESCO, 2010: 54) and there is evidence that progress toward UPE is slowing (UNESCO, 2011). In response to this challenge, questions have been raised about the potential contribution of non-government schooling to achieving EFA and the education-related MDGs (Lewin, 2007; Rose, 2009; Srivastava & Walford, 2007; Tooley et al, 2007).

Of particular interest has been the phenomenal growth of low-fee private (LFP) schooling in some countries, notably India. Those who support an expanded private sector argue that these trends signal more cost-effective educational opportunities which meet the aspirations of parents, including relatively low-income parents, disillusioned by the weaknesses of the government sector and keen to give their children access to what they perceive is better quality education (Tooley, 2004a, 2004b; Tooley & Dixon, 2006; Tooley et al, 2007). Meanwhile, others voice concern about equity, arguing that private schools may continue to be out of reach of those from the most marginalised backgrounds and emphasising the core responsibilities of governments in fulfilling children's right to education (Lewin, 2007; Rose, 2009; Watkins, 2000). In essence, they contend that 'the real challenge for governments with basic education systems that are broken is to fix the system' (UNESCO, 2009: 16), a problem not addressed through a reliance on expanded private provision.

India has a well-established government school system, and an equally long tradition of private schools. Recent years have seen significant increases in the extent of the low-fee private sector (De at el, 2002; Kingdon, 2007; Srivastava, 2006). Economic growth and liberalisation have been instrumental in laying the foundation for this growth. India's schools now fall into three main categories: government, private aided and private unaided, (the latter of which may be either

government recognized or unrecognized). It is these private unaided schools that have seen most rapid growth, but they are often not captured in official statistics which consequently underestimate the significance of the private sector as a whole. Furthermore, state-wise differences in their prevalence are stark, as evidenced by the most recent ASER data (Pratham, 2012). The growth in these private schools is partly demand driven; often attributable to dissatisfaction with the poor quality of the government sector where teacher absenteeism is rife (Harma 2009; Kingdon, 2007; Pal, 2010), and the perceived superiority and advantages offered by English-medium teaching in private schools (Kingdon, 1996), not traditionally available in the government sector. However, other factors are also important, with Pal (2010) finding that public infrastructure is important for private school presence in a village. At root, private schools are associated with aspirations for higher social status and improved opportunities for future employment.

Many studies have compared the government and private sector across India, although few adopt rigorous and representative designs sufficient to establish the relative effectiveness of the two options across both rural and urban areas usually in terms of learning achievement (for example: Goyal & Pandey, 2009; Kingdon, 1996; Muralidharan & Kremer, 2006; Pratham, 2009; The Probe team, 1999; Tooley et al 2007 and others). Private schools are usually found to be associated with higher pupil test scores (Goyal & Pandey, 2009; Kingdon, 1996; Muralidharan & Kremer, 2006; Tooley et al, 2007; Tooley et al, 2010), and better facilities, resources and infrastructure (The Probe team, 1999). For example, Tooley et al (2010) found that children in private recognised and unrecognised schools in the city of Hyderabad (the state capital of Andhra Pradesh) achieved higher test scores in English and Maths than their government school counterparts and that private unaided schools also offered superior facilities to the government equivalent. Low-fee private schooling is therefore suggested as a solution for poor families to the poor quality available at government schools, and their growth is viewed as positive for EFA goals and should be encouraged (Tooley & Dixon, 2006).

However, serious concerns have been raised about which groups actually succeed in accessing these low-fee private schools (Juneja, 2010), and the extent to which private schools remain out of reach of the poorest and most marginalised in society (Harma, 2009, 2011 in India; Rose & Adelabu, 2007 in Nigeria). As Kingdon (2007) emphasises, while these schools may be numerous in urban areas, they are much less widespread in rural areas, making physical access more challenging. Affordability is an even more significant factor, with the poorest families often 'priced- out' of the private sector. As is often the case in India, gender also acts as an important determinant of private school enrolment, with some studies showing that girls are consistently less likely to attend than boys (De et al, 2002; Mehrotra and Panchamukhi, 2006). Parental-level variables are also key factors, with parents' education level, as well as their aspirations for their children often shaping educational preferences and feeding through to children's educational outcomes (Muralidharan & Kremer, 2006). Specifically, Kambhampati & Pal (2001:116) using data from West Bengal found that both maternal and paternal education impacted children's enrolment, with fathers' education impacting the education of both boys' and girls' enrolment and mothers' education impacting only the chances of girls being enrolled. Within the household, number of children, birth order and gender of siblings has a strong impact, with low resource households who wish to access private schooling, sometimes having to choose which of their children will receive a private, fee-paid education (Iram et al, 2008; Ota & Moffatt, 2007).

Harma (2009, 2011) draws on this literature in interpreting her own research in Uttar Pradesh. She concludes that private schools are by no means accessible to all sections of the poor and that poverty 'is still a bar to the majority,' with caste, religion, gender, sibling composition, parental age, education and occupation also playing a role (2009: 151). Her interviews with parents in Uttar Pradesh in 2005-6 demonstrated that families would prefer an improved government sector to an expanded private one, and that most were not really able to afford low-fee private schools (Harma 2009: 164). She therefore suggests that reform to the government sector with accountability as a 'core principle' is more important than an expanded private sector, which is largely driven by market forces rather than EFA principles. In short, *all*

schools must be improved if the goal of UPE is to be achieved (see also Juneja, 2010:38). If wealthier or more proactive parents continue to be encouraged to select private schools in order to access what they believe will be a better quality education that can increase their child's life chances, this may have further negative effects on the government sector (De et al, 2002), as well as perpetuating broader inequalities. The alternative argument is that increased competition from the private sector may actually drive up standards in government schools, although doubts have been expressed whether existing governance structures would enable school systems and school principals to respond to such changing market conditions, and Pal (2010) find no significant impact of private school presence on grade five pass rates in village government schools. In short, suggesting that governments are able to improve their schools fast enough to meet the MDGs by 2015 is seen by some as unrealistic (Walford, 2011).

This debate comes at an important juncture in Indian education policy. The Right to Education Act 2009 guarantees children the right to a free and quality education and requires all unrecognised schools to come under the umbrella of government regulation. Moreover, 25 per cent reservation of places in private schools is required for children from poor and marginalised backgrounds in the neighbourhood, to be subsidised by government. The Right to Education Act thereby endorses a role for the private sector in achieving universal primary education, and includes a mechanism intended to ensure that the poorest are not excluded.

In support of this policy development, Jain & Dholakia (2009) argue that, even with the 6 per cent allocation of GDP to the education budget, universal school education would not be achievable for many years if the government school system is used as the only vehicle, hence the importance of the low fee private sector. They also take their argument a step further, suggesting that low fee private schools should be incorporated directly in government education policy, with one proposal drawing on Tooley et al's (2007) research to suggest that the government go as far as to contract out the bulk of school education delivery up to grade 5 to private schools (Jain & Dholakia, 2009: 42). Interest in public-private partnerships (PPPs) has grown in many parts of the developing world in recent years (Patrinos et al 2009). Yet, even

within comprehensive PPP policies, 'the state continues to be viewed as having the moral, social and legal responsibility for overall education-service delivery and so is expected to play a role in facilitating and regulating non-state providers ' (Rose, 2010:474). By contrast, according to Srivastava (2010), in India the strategies put forward under the guise of PPP have entailed relatively unregulated privatisation and a reduced government role in educational provision, rather than partnership per se. The goal of the current paper is to inform these debates with evidence on the impact of a growing private sector on educational opportunities, based on the experiences of nearly three thousand children in the Indian state of Andhra Pradesh, who are being tracked throughout their school years, and beyond.

## **2. Access to government and private schools: the potential of *Young Lives*' longitudinal research**

One of the limitations of current research informing this debate is that studies mainly focus on specific populations at specific points in time. This paper offers a more comprehensive picture of the impact of private schooling during the first decade of the 21<sup>st</sup> century, in three respects: we are able to report complete school history data for individual children; our sample is drawn from a wide range of urban and rural sites; and we are able to report on changing patterns of use of government and private schools. Specifically, this paper extends existing work, such as that done by Harma (2009, 2011), beyond rural areas to include rural and urban comparisons, as well as monitoring school trajectories for two cohorts born 7 years apart. We are also able to consider the role of individual level factors such as caste/ethnicity, gender and urban/rural residence and household level factors, such as wealth, parental education and aspirations, and sibling characteristics in shaping children's chances of attending a private versus government school.

The following sections of the paper are based on large sample longitudinal research in the state of Andhra Pradesh, carried out as part of *Young Lives*, a four country child poverty study, of 12,000 children in Ethiopia, India, Peru and Vietnam<sup>1</sup>. The core research design involves two

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<sup>1</sup> For more information see: [www.younglives.org.uk](http://www.younglives.org.uk)



cohorts of children (born in 1994-5 and 2001-2 respectively) who are being tracked over a fifteen year period. *Young Lives* is thus in a unique position to monitor the impact of recent trends on changing school opportunities and trajectories. We are also able to explore how increasing enrolment in private schools has differentially impacted children in Andhra Pradesh. We acknowledge that our findings are specific to Andhra Pradesh, which has been amongst the more successful states in India in achieving relatively high school enrolment, with Net Enrolment Ratio of 80.2 percent at primary level in 2009-10 as compared to 78.8 percent in 2007-08.

The summary statistics in Table 1 draw on data from the 2011 ASER surveys (Pratham, 2012) to help situate Andhra Pradesh in terms of private school enrolment rates, which are relatively high at 38.7 per cent for children aged 7-10, compared with 25.3 per cent for all India. However, Table 1 also highlights that other states like Uttar Pradesh and Kerala have even higher rates of private school enrolment, at 44.1 per cent and 61.1 per cent respectively; in other respects these are very diverse states, respectively having the highest (6.1%) and lowest (0.1%) percentages of children out of school between the ages of 6-14 (Pratham, 2012). Table 1 is also useful in drawing attention to one of the major equity issues examined in this paper, namely the over representation of boys in private schools, which is a trend that is visible in the majority of Indian states.

**Table 1 Enrolment rates by school type for children age 7-10 in selected states**

		Govt	Pvt	Other	Not in School
<b>All India Age 7-10</b>	All	71.5	25.3	1.3	1.9
	Girls	74.1	22.5	1.4	2.1
	Boys	69.3	27.8	1.2	1.8
<b>Andhra Pradesh Age 7-10</b>	All	59.9	38.7	0.3	1.1
	Girls	64.8	33.5	0.3	1.4
	Boys	54.9	44.1	0.2	0.8
<b>Uttar Pradesh Age 7-10</b>	All	48.9	44.7	2.9	3.5
	Girls	53.8	38.9	3.6	3.7
	Boys	44.8	49.5	2.3	3.4
<b>Kerala Age 7-10</b>	All	37.9	61.1	1.0	0.1
	Girls	37.7	61.2	1.1	0.1
	Boys	38.0	61.1	0.8	0.0

Source: Provisional data from the 2011 ASER survey, Pratham (2012)

In short, while acknowledging that the role of the private sector is variable across India, we argue that *Young Lives'* evidence for Andhra Pradesh is instructive of some of the key challenges for any policy initiatives built around incorporation of the private sector into government strategies to achieve the goals of Education for All. The paper focuses on four major questions:

1. How have educational trajectories changed over the period 2001-9 (the period for which school history data is available), especially enrolment and drop-out, and trajectories through (and between) government and private schools?
2. How does rural versus urban location impact on changing patterns of access to government versus private schools for the two cohorts, 7 year apart in age?
3. Within urban and rural locations, which families are most likely to use government versus private education; in particular how far are inequities of access linked to poverty, gender, caste/ethnicity, education of caregiver, caregiver aspirations and sibling age and gender?
4. How is school choice shaped by household composition, especially birth order and gender of siblings?

At the time of writing, 2011, *Young Lives* has carried out 3 major survey rounds (in 2002, 2006-07 and 2009), with further rounds planned in 2013 and 2016. The core sample in Andhra Pradesh comprises 976 older cohort (OC) children born in 1994-1995 and 1,930 younger cohort (YC) children born in 2001-2002. These two cohorts of children were sampled randomly from twenty sentinel sites, chosen to represent a variety of economic, demographic and social circumstances, including rural and urban sites. Since the two cohorts are from the same communities, they are directly comparable. Comparing the school experiences of two cohorts from the same communities across 20 diverse locations makes it possible to identify changes in

patterns of school attendance over time and identify how different school trajectories are associated with a variety of contexts and household circumstances in Andhra Pradesh.

The main source of data for this paper is Round 3 of *Young Lives*' household survey (2009). Households and children were asked to provide retrospective school histories, enabling an examination of children's changing educational trajectories in and out of school, and between different types of schools. A variety of possible response categories were provided, but for the purposes of this paper's analysis, schools are split into 'private' 'public' and 'other.'<sup>2</sup> Detailed household and individual data also collected across the rounds enables a breakdown of this changing enrolment by relevant community, socioeconomic and household level factors such as location, wealth, caste, parental education and aspirations, and sibling characteristics.

Any study of access to different types of school must take account of questions about their differential availability. *Young Lives* collected information on availability of different types of school as part of a community survey. If a private school was not available in the community itself then respondents were asked about the location of the nearest such school, whether children from the community attended, journey times, and availability of transport. If children from the community made the journey and the time taken to reach the school was not substantially more than that it would take to reach schools within the community then it was counted as being easily accessible. This allowed us to establish that private schools were available either within the community or in a nearby and readily accessible locality for every community bar one. Six older cohort children and 12 younger cohort children were thus excluded from the regression analysis as they lived in a community with no ready access to any private school according to this community survey.

Since this data is gathered through a household survey, nuances of school type within the Indian private sector - between government aided, unaided, recognised and unrecognised

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<sup>2</sup> Categories for 'private' and 'public' followed the same response categories, and 'NGO/charity/religious (not-for-profit),' 'informal or non-informal Community,' 'vocational school,' 'charitable trust,' 'bridge school,' 'mix of public and private' or 'other' were subsumed into the category 'other.'

private schools - could not be captured through parental and child reports. However, this does not detract from our overall analysis of movements between the private and government sectors, especially since parents are often not fully aware of the more subtle distinctions in recognition status (Harma, 2011:4). In presenting this evidence on divergent school trajectories, it is important to make clear that we are not making *a priori* assumptions about the relative quality and benefits of attending private versus government schools. Our focus in this paper is solely on questions about which children access different types of school – and which do not - at a time of very rapid change in education opportunities. Overall, the strength of *Young Lives*' longitudinal survey data lies in its ability to capture the educational trajectories of two diverse cohorts of children who are just seven years apart in age. This design enables us to analyse the differing experiences of children over time, as well as changes that have occurred within these children's school careers.

### 3. Inequities in school access for two cohorts of children in Andhra Pradesh

#### 3.1 Diverging school trajectories

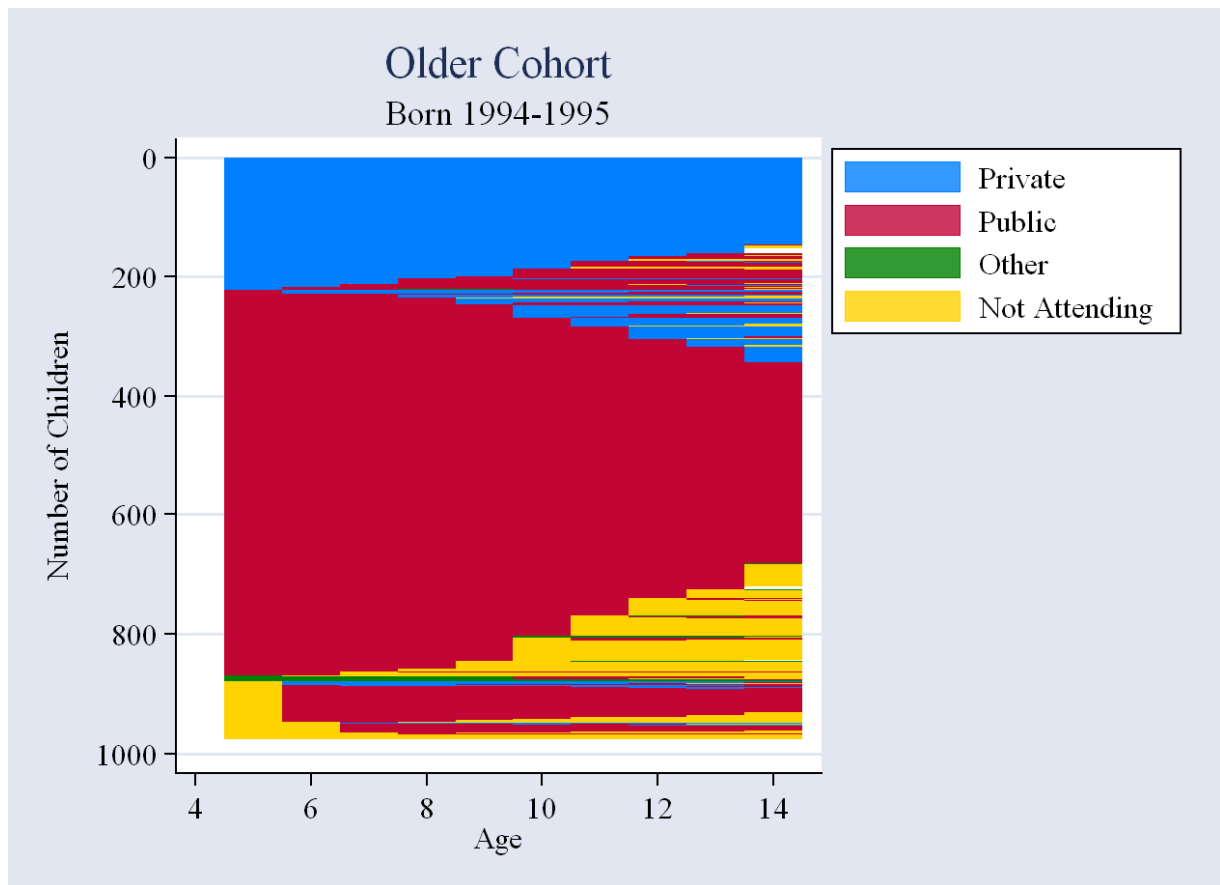


Figure 1 Sequence index plot of school type for the older cohort aged 5-15 years

We begin by offering an overview of the school trajectories for *Young Lives'* older cohort in Andhra Pradesh. By Round 3 data collection in 2009, this cohort was already 15 years old, making it possible to construct a detailed school history for each child. Figure 1 is a sequence index plot in which each horizontal line represents a child and the colour of the line changes according to the type of school parents reported that the child had attended at each age from 5 to 15 years old. In this way, individual school histories of all 976 older cohort children can be represented and major trajectories identified. Figure 1 vividly portrays the divergence in educational trajectories amongst older cohort children, notably for children who were reported

to have started their school careers in government school compared with those who started in private school.

72.4 per cent of the 976 older cohort children were attending a government school in 2001 (when they were aged 5-6), but only 49.1 per cent remained in a government school until 2009 (when they were aged 14-15). Most of those moving out of government schools experienced two widely diverging trajectories: either dropping out, or transferring to private school. 26.7 per cent of children who started in a government school had dropped out by 2009. Note that dropping out was an even more frequent outcome for children who started school after the normal starting age, with 30 out of the 98 late starters dropping out by 2009. The other major trajectory involved children transferring to private school: 9.5 per cent of children began in government school but had transferred into private school by 2009. They joined the 22.6 per cent (221 older cohort children) who had begun school within the private sector. Once in private school, most children remained in the private sector through to 2009, with very few (5.9 per cent) dropping out of school altogether, compared to the 26.7 per cent who dropped out from government schools. In summary, while attendance at government school dropped from 72.4 per cent to 49.1 per cent during these core years of the older cohort's schooling, attendance at a private school increased from 22.6 per cent to 27.7 per cent.

Overall, Figure 1 serves to illustrate the complex dynamics of school attendance for *Young Lives'* older cohort children, the growing importance of the private sector, the significant number of children transferring from government to private sector during their school career, and to a lesser extent vice-versa. Figure 1 also draws attention to the numbers of children starting school late, or dropping out early, with around 30 per cent not in school at some point between the ages of five and fifteen; once a child dropped out of school they were unlikely to return. What is less clear from Figure 1 is how far these changes are due to increasing preference for private school related to children's age and how far they also reflect a trend towards greater use of the private sector during the first decade of the 21<sup>st</sup> century. The next section sheds light on these school choice dynamics, by comparing these older cohort children's

school experience with the younger cohort who started primary schooling more recently (around 2006-7). It confirms that there has been a very dramatic shift towards using the private sector in Andhra Pradesh, over a period of only seven years.

### 3.2 Changing school trajectories for the two cohorts

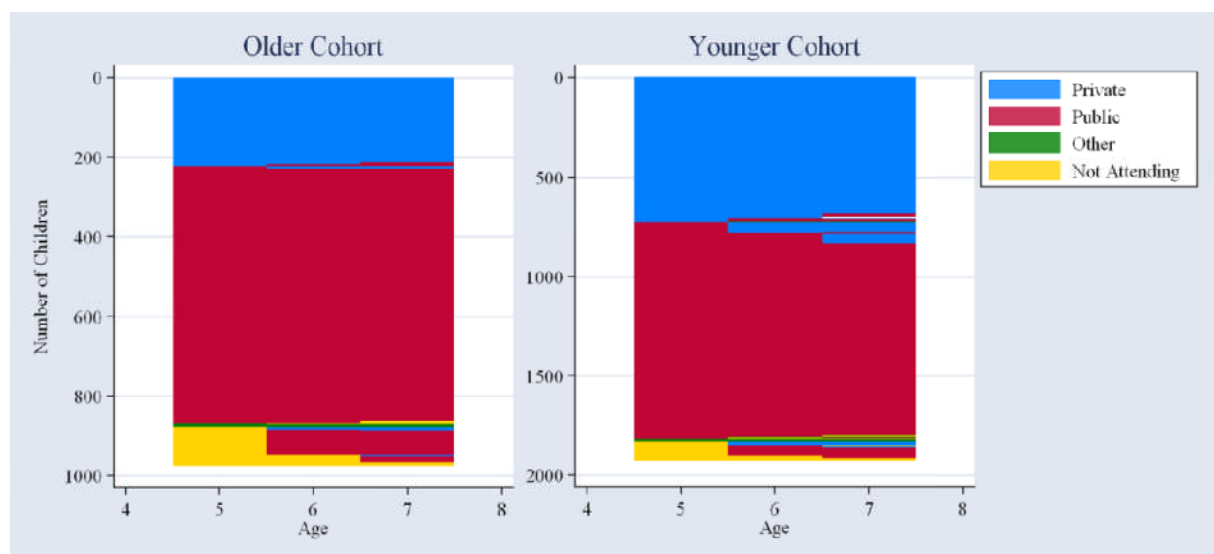


Figure 2 The schooling trajectories of younger cohort children (born 2001-2002) and older cohort children (born 1994-1995)

The younger cohort were around eight years old in 2009, so we currently only have data on the early stages of their school career. Accordingly, for the purposes of comparison, Figure 2 summarises major school trajectories for both cohorts of *Young Lives*' children during the three year period from five to eight years old. Individual school histories of 1,930 younger cohort children are represented, commencing when these children were between 5-6 years old in 2006-07 and most had begun primary school. Comparison is offered with corresponding data for the 976 older cohort children who were 5-6 years old in 2000-01.

Two major trends emerge. Firstly, there was a marked increase in private school enrolment for the younger compared with the older cohort. At 8 years old, 24 per cent of the older cohort were attending private school. Seven years later, 44 per cent of the equivalent group of 8 year old younger cohort children were attending private school. Secondly, the trend observed for the older cohort, of children switching between school type, is amplified for the younger

cohort, even during the first few years of schooling, mainly from public to private, and sometimes vice-versa.

### ***3.3 Changing opportunities in urban and rural contexts***

The overall trends in Figure 2 demonstrate firstly that school trajectories of *Young Lives*' children in Andhra Pradesh are increasingly divergent and secondly, that this is largely accounted for by the increasing significance of the private sector. However, these overall trends mask important differences in opportunities available to families and children according to their area of residence. *Young Lives*' sentinel site sampling includes 15 rural sites distributed across the state plus five urban sites (including the capital, Hyderabad) (Kumra, 2008).

Table 2 uses data on school type attended by both cohorts at the latest point we have school attendance data for both cohorts (i.e. when children were 7-8 years old). In other words, it summarises the opportunities for this age group in 2001 compared with 2009. Table 2 confirms that private school attendance has been especially concentrated in urban locations for both cohorts, indeed it has been the norm for urban 7-8 year old children's educational experience throughout the decade. Moreover, urban private school participation rates continued to grow in the *Young Lives*' samples (from 64 per cent for the older urban cohort in 2001 to 79 per cent for the younger urban cohort in 2009). While the highest private school participation rates are in urban areas, the biggest growth in the sector has been in rural areas. Private school was attended by a minority (10 per cent) of older cohort children in rural sites in 2001, with the great majority (87 per cent) attending government schools. The seven year interval between cohorts has seen a threefold increase in private school attendance by 8 year olds in rural areas (to 31 per cent in 2009).



**Table 2 School attendance of both cohorts aged 7-8 years**

		Older Cohort					Younger Cohort				
		Private	Public	Other	Not Attending	Total	Private	Public	Other	Not Attending	Total
Urban	N	157	81	5	3	246	382	89	12	1	484
	%	63.8	32.9	2.0	1.2	100	78.9	18.4	2.5	0.2	100
Rural	N	74	637	4	15	730	447	966	5	16	1,434
	%	10.1	87.3	0.6	2.1	100	31.2	67.4	0.4	1.1	100
Total	N	231	718	9	18	976	829	1,056	17	17	1,919
	%	23.7	73.6	0.9	1.8	100	43.2	55.0	0.9	0.9	100

### ***3.4 School access and inequalities of opportunity***

Next we turn to evidence on differential patterns of access to government and private schools within both urban and rural sites. As we have seen, ever larger numbers of children were accessing the private sector during the decade. But these summaries say very little about which children and families are using private schools. One of the main challenges to the claim that private education can contribute to EFA goals centres on the risk of perpetuating inequities of access and the consequent perpetuation of social stratification, notably linked to poverty, gender and caste/ethnicity as well as intra-household level factors such as parental education and aspirations, and sibling characteristics. This section offers descriptive statistics on these issues, which is followed in Section 3.5 by the results of regression analyses.

Tables 3 and 4 disaggregate the data on these variables for rural and urban sites respectively, in each case showing the percentage of children who had attended a private school at some point during their school careers. Columns 1 and 2 represent attendance rates during the early school years for both the younger and older cohorts between ages 5-8 years, for which we have comparable data. The third column offers the same analysis for the older cohort throughout their school career to the age of 15.

The first thing to note is that, without exception, the probability of attending a private school was higher in urban areas than in rural areas for all children. The urban-rural gap tended to shrink between age 8 and 15 for children in the older cohort, indicating that children in rural areas tend to start private school later if they ever attend this type of school and ultimately

tend to have fewer years of private schooling even if they do access it, compared to their counterparts in urban areas. Other major inequalities in private school attendance also become clear though – especially linked to gender, wealth and parental education.

**Table 3 The percentage of children who have ever attended private school by cohort and age in rural sites**

Per cent Ever attended private school (rural)		YC (age 5-8)	OC (age 5-8)	OC (age 5-15)
<b>Gender</b>	<i>male</i>	39.8	12.2	30.5
	<i>female</i>	24.7	10.0	22.8
<b>Wealth</b>	<i>poorest</i>	14.8	1.6	9.0
	<i>middle</i>	27.3	4.6	20.7
	<i>least poor</i>	57.1	27.2	50.6
<b>Caste/Ethnicity<sup>3</sup></b>	<i>SC</i>	24.6	6.4	20.8
	<i>ST</i>	20.8	8.1	19.2
	<i>BC</i>	33.0	7.1	22.6
	<i>OC</i>	59.7	32.5	53.5
<b>Education of primary caregiver</b>	<i>None</i>	24.6	6.0	20.7
	<i>Primary</i>	36.3	22.2	41.7
	<i>Middle</i>	54.0	27.1	47.9
	<i>Secondary/higher</i>	66.9	46.0	59.5
<b>Aspirations</b>	<i>Up to secondary</i>	18.9	4.5	14.9
	<i>Post secondary/vocational</i>	36.6	15.2	32.6
	<i>University</i>	45.0	16.6	36.6

<sup>3</sup> SC: Scheduled caste, ST: Scheduled tribe, BC: Other backward caste, OC: Other Caste

Table 4 The percentage of children who have ever attended private school by cohort and age in urban sites

Per cent Ever attended private school (urban)		YC (age 5-8)	OC (age 5-8)	OC (age 5-15)
Gender	<i>male</i>	80.7	64.8	74.2
	<i>female</i>	79.4	62.8	64.5
Wealth	<i>poorest</i>	63.9	43.9	53.7
	<i>middle</i>	88.1	73.2	76.8
	<i>least poor</i>	93.9	76.8	80.5
Caste/Ethnicity	<i>SC</i>	65.6	33.3	48.5
	<i>ST</i>	54.6	62.5	62.5
	<i>BC</i>	82.2	61.8	67.3
	<i>OC</i>	85.2	76.5	79.6
Education of primary caregiver	<i>None</i>	68.4	50.0	59.0
	<i>Primary</i>	61.2	55.9	55.8
	<i>Middle</i>	80.0	71.4	78.6
	<i>Secondary/higher</i>	90.7	82.2	84.9
Aspirations	<i>Up to secondary</i>	65.2	47.7	53.9
	<i>Post secondary/vocational</i>	77.3	57.7	57.7
	<i>University</i>	86.9	71.5	77.9

Dynamics of the gender gap are particularly interesting – and elaborate on the national trends already reported in ASER surveys and reported in Table 1 above. Within the *Young Lives*’ sample, there is little difference in private school attendance for boys and girls in the younger cohort in urban areas and for the older cohort in the early years of schooling, but the experience of the older cohort indicates that the gender gap tends to open up in urban areas as children get older and especially as they leave primary school (assuming normal age-for-grade progression). Investigating this further, Figure 3 demonstrates that the gender gap began to open up for the older cohort around the age of ten in urban areas; until this point males and females had very similar chances of attending a private school. However, when girls reached this age in urban areas, their chance of being enrolled decreased to less than 50 per cent at age 15 from almost 65 per cent at ages 9 and 10. In rural areas the gender gap similarly widened from age 10, though it remained evident at all ages. This gendered dimension of private school choice confirms evidence that boys’ education has traditionally been favoured due to assumed higher future economic returns as well as social norms which encourage families to cease daughters’ education before that of sons (Ota & Moffatt (2007). Importantly, *Young Lives*’ data

suggests this traditional gendered division of school enrolment or non-enrolment choices, is in some respects now being played out through gender-linked private versus government school choices.

Importantly, data from the younger cohort suggests gender-based divisions have increased over the past decade for the poorest rural families, as private school participation grows. Thus, a 9 percentage point gender gap in attendance at private school was already evident by 8 years old, as shown in figure 3, for the poorest rural sample, (93 per cent of females and 84 per cent of males had never attended private school at age 8). It seems highly probable that this gender divide in school use will widen during later childhood, following the trend already evident in the older cohort. Figure 3 shows what the gender gap will look like for younger cohort children if current trends are extrapolated. Of course, these are statistical projections, not predictions, and many factors may alter these future gender linked trajectories, which *Young Lives* will track through future data collection rounds.

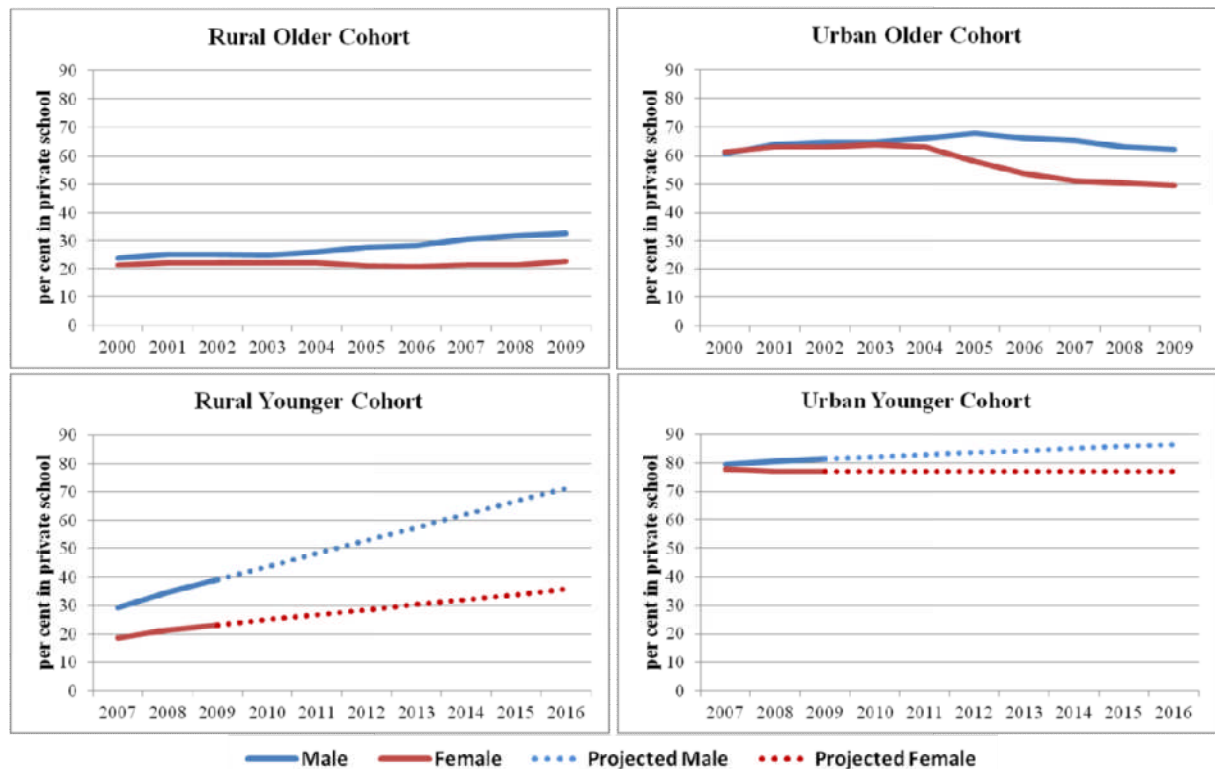


Figure 3 Per cent attending private school by cohort in urban and rural areas with projections based on current trends<sup>4</sup>

Not surprisingly, household poverty levels also play an important role in access to private schools, which is strongly evident in rural areas. *Young Lives* is a pro-poor sample, but includes many different levels of poverty amongst the households studied. Tables 3 and 4 divide the sample into three wealth tertiles, based on household indicators. While attendance at private school increased for all wealth tertiles, the poorest group still only achieved 14 per cent and the gap in attendance rates between this group and the least poor rural households actually widened (from 25 percentage points to 42 percentage points during the seven year period). In urban areas private school attendance increased less but the gap between the poorest and least poor tertiles remained virtually constant at about 30 percentage points. Overall, the data draws attention to the importance of disaggregating the ‘poor’ in terms of wealth, and

<sup>4</sup> The projections are based on a simple linear extrapolation of the data points. It is emphasised that they indicate what would happen *if* the trends in the data were to continue, but they do not make any claim to predict what *will* happen.

emphasises that for many of the 'poorest' children and families in Andhra Pradesh, private schooling continues to be out of reach.

Closely related to other dimensions of household socioeconomic status, caste is also associated with school choice. For the older cohort between the ages of 5-8 in rural areas, 32.5% of children from 'Other Castes' (OC) had ever attended private school, compared to between 6-8% of enrolment for children from each of the other, traditionally disadvantaged caste categories – Scheduled Castes (SC), Scheduled Tribes (ST) and Backward Castes (BC). For the younger cohort age 5-8 in rural areas, more children from SC, ST and BC backgrounds were enrolled in private schools than 8 years earlier, but children from OC backgrounds had also significantly increased their enrolment in the sector. In urban areas, similar trends play out<sup>5</sup> but with larger proportions, since more children in urban areas attend private schools.

Both the education and aspirations of the primary caregiver (in virtually all cases the biological mother) were found to be strongly associated with choice of school. The gap in private versus government school enrolment between rural children whose caregiver had no education and rural children whose caregiver had at least secondary education was about forty percentage points for all three groups. This gap had generally widened between the two cohorts indicating that those children whose mothers have little education are likely to face increasing inequalities in terms of access to private schooling. The caregiver's stated aspirations for their children appeared to be associated with slightly lower inequalities but in general children whose caregiver said they wanted them to attend university were much more likely to have attended private school than those whose caregiver said they expected their highest level of education to be secondary school or below.

These inequities are substantial on their own but, when combined, they highlight the ways that multiple disadvantages impact on children's educational opportunities. Among the older cohort there were 98 girls living in rural areas who were in the poorest wealth tertile and whose primary caregiver reported they had not received any formal education. Almost all these girls

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<sup>5</sup> For ST children in urban areas, private school enrolment seems to decrease between the older and younger cohorts. However, only 22 younger cohort and 8 older cohort fall into the urban ST category, making comparison and trends unreliable.

were effectively excluded from attending private schooling, with 97 per cent of them not attending private school by the age of 8, and 91 per cent still having not accessed a private school up to the age of 15. The picture for the 102 boys in the same circumstances was rather different. While 92 per cent of them had not attended private school by age 8, that figure was reduced to 77 per cent by age 15. This reinforces evidence that the gender gap tends to increase with age – the poorest rural families must make hard choices about scarce resources and often choose to invest in private education for their sons over their daughters. For the older cohort, this seems to predominate in the later stages of schooling, perhaps relating to the increased availability of private schooling over the course of their children’s school careers.

### ***3.5 Modelling factors shaping access to private versus government schools***

The results presented so far draw attention to the possibility that increased private school participation in Andhra Pradesh is amplifying social stratification related to location, poverty, caste/ethnicity, parent education levels, aspirations and gender. While private schooling may indeed increase access for some groups in poverty contexts, in practice other families and children do not have choices in respect of which school their children attend. This is affected by availability and accessibility, by ability to pay school fees and by family priorities for educational investment, especially amongst siblings. While it would never be expected that all children have equal chance of attending all types of school, our focus is on which groups may be left behind if private schooling is envisaged as able to play a central role in the achievement of EFA goals.

In this section, binomial logistic regression is used to study the factors that affect children’s chances of having ever attended private school (based on our data through to 2009). Three models are presented: (i) for the younger cohort children during their early school careers (5-8 years), (ii) for the older cohort children at the same age period (to offer a direct comparison with younger cohort children) and (iii) for older cohort children aged 5-15 years. The results are shown in Table 5. Covariates are included for gender, rural/urban residence, household wealth, caste/ethnicity, caregiver’s education, sibling composition and parental aspirations.

The first thing to note is that the largest single factor affecting a child’s chances of attending a private school is living in an urban area, which confirms the descriptive statistics in earlier

sections. For children in the older cohort aged 5-8 the (relative) odds of attending a private school were 16 times higher if they lived in an urban area when compared to a rural area, when controlling for other characteristics. Importantly, the urban advantage shrinks between the two cohorts to 8.8, which is still a substantial inequality. While the urban advantage appears to be decreasing between the cohorts, the gender gap is confirmed to be increasing both between the cohorts and as the children get older (confirming Ota & Moffatt, 2007).

The second largest factor affecting likelihood of private school attendance is household wealth, influencing ability to pay for private schooling. However, this gap does appear to have narrowed between the two cohorts, as private schooling becomes more widely available, as indicated in the relative advantage of children from the 'least poor' wealth tertile declining from 6.7 to 4.6 times higher than those in the poorest tertile.

Both the primary caregiver's education and parental aspirations have a clear link with children's chances of attending a private school. The effect of caregiver's education decreased in strength for children in the older cohort as they increased in age. However, the size of the effect for parental aspirations was quite strong with an odds ratio of around 2.2 or 2.3, indicating that a child with parents who wanted their child to continue in education to university level was at least 220 per cent more likely to attend private school *ceteris paribus* than a child whose parents expected them to be educated to secondary level or below.



Table 5 Binomial logistic models of having ever attended private school

		(i)		(ii)		(iii)	
		YC (5-8)		OC (5-8)		OC(5-15)	
		Odds Ratio	P value	Odds Ratio	P value	Odds Ratio	P value
<b>Male</b>		1.61	0.00	1.19	0.39	1.50	0.02
<b>Urban</b>		8.82	0.00	16.16	0.00	6.14	0.00
<b>Wealth</b>	<i>poorest</i>						
	<i>middle</i>	1.93	0.00	2.33	0.00	2.32	0.00
	<i>least poor</i>	4.61	0.00	6.72	0.00	5.82	0.00
<b>Caste/Ethnicity</b>	<i>OC</i>						
	<i>SC</i>	0.45	0.00	0.28	0.00	0.46	0.00
	<i>ST</i>	0.45	0.00	0.43	0.04	0.46	0.02
	<i>BC</i>	0.67	0.01	0.36	0.00	0.44	0.00
<b>Caregiver's Education</b>	<i>None/Incomplete Primary</i>						
	<i>finished primary</i>	1.87	0.00	2.00	0.02	1.87	0.02
	<i>finished secondary</i>	2.30	0.00	2.38	0.00	1.62	0.10
<b>Aspirations</b>	<i>up to secondary</i>						
	<i>post secondary/vocational</i>	1.65	0.02	2.60	0.02	2.19	0.02
	<i>university</i>	2.30	0.00	2.20	0.00	2.31	0.00
<b>Older brothers</b>		0.65	0.04	0.66	0.02	0.64	0.00
<b>Younger brothers</b>		0.83	0.05	1.05	0.79	0.83	0.25
<b>Older sisters</b>		0.92	0.64	0.84	0.27	0.70	0.01
<b>Younger sisters</b>		0.89	0.11	1.14	0.46	1.05	0.74

Caste also predicts access to schooling opportunities. Children from SC, ST and BC are disadvantaged relative to OC in terms of enrolment in private school. The odds of children from these castes attending private school were as much as 50 to 70 per cent less than OC children and the effects were significant across all the models.

The relationship between siblings and school type is also studied. The effect of older brothers, older sisters, younger brothers and younger sisters are all modelled separately. The most significant finding is that each older brother reduces the chances of a child having attended private school by about 35 per cent. Neither having younger brothers nor younger sisters were found to have an effect on the chances of attending private school. Intriguingly, having an

older sister did have an effect of reducing chances of private school attendance for the older cohort children aged 5-15. This may indicate that as children get older, having older siblings of either gender becomes a disadvantage since parents are already likely to have invested what little resources they can muster on their older children, and of course the burden of fees is long term and normally increases as children progress through schooling.

Finally, the gender divide widens between cohorts even after controlling for other factors. For the older cohort there is no significant difference between the genders at ages 5-8, but for ages 5-15 male children are significantly more likely to attend private school. For the younger cohort a highly significant gender gap is already visible at ages 5-8.

In short, *Young Lives'* data highlights multiple inequalities of opportunity, shaped by differential availability and affordability as well as tough choices faced by poor households in a context where the growing private sector co-exists with - and to some extent competes with - the government sector.

## 4. Conclusion

This paper has sought to inform debates about the potential role of the private sector in achieving EFA, with a specific focus on the situation in Andhra Pradesh, India. It builds on previously reported *Young Lives'* research which highlighted inequitable access to services during children's pre-school years, linked to the growth in private kindergarten classes in Andhra Pradesh (Streuli et al 2011; Woodhead et al 2009). *Young Lives'* evidence for primary school now shows that uptake of private education has increased dramatically since 2002 across the 20 sampled sites, with 24 per cent of the older cohort attending private school at the age of 7-8 in 2002, nearly doubling to 44 per cent of the younger cohort at the same age of 7-8, only seven years later, in 2009. If the pattern of children transferring from government schools into the private sector during their school career is repeated (as so clearly seen for the older cohort in Figure 1), then it is probable that a majority of younger cohort children will be in private schools when the next round of the *Young Lives'* survey is completed in 2013 (when

these children will be 11-12 years old). This growth in enrolment in private school includes increasing numbers of children from relatively poor households. Yet, the outcomes are far from equitable, as previous sections make clear.

Our analysis has shown that whilst private schooling is highly concentrated in urban areas, the biggest growth in the sector has been seen in rural areas, where only 10 per cent of the older cohort attended compared to 32 per cent of the younger cohort, later in the decade. Household wealth is a key determinant of school choice and children's changing school trajectories. However, the urban-rural contrast complicates any simple wealth-based analysis, in that the richest rural groups are still less likely to be enrolled in private school than the poorest groups in urban areas. In an education system where market-driven change is becoming so widespread, children's educational opportunities are additionally shaped by parents' aspirations, as well as by ability and willingness to pay school fees and school-related costs, for one or more children. Boys and girls have increasingly differentiated experiences of the private sector. For the older cohort in urban areas, little difference in enrolment is evident at primary level, with a gap opening up after primary, in contrast to the older cohort in rural areas for whom a gap is evident at all ages, also widening after primary. Trajectories of the younger cohort, however, suggest gender-based school choices are more prevalent and present from an earlier age. Additionally, inter and intra household factors such as caregiver education and aspirations, and birth order and sibling composition are shown to shape children's educational opportunities.

One feature of these educational opportunities which the current paper has not been able to address is the heterogeneity of the private sector. Families are faced with decisions about which private school to buy into, in a marketplace where schools of highly variable reputation, quality and costs are on offer, especially in urban areas. From *Young Lives'* data currently available, we are not able to disaggregate 'private' in terms of these cost/quality issues, nor the social capital and exclusivity that is associated with the higher status schools, nor their differential accessibility according to household location, poverty, caste/class, gender etc.

Future papers will address these issues, based on recent *Young Lives*' research on school quality, and on parental decision making.

However, the implications of the current findings seem clear. Supply-of and demand-for private schooling in Andhra Pradesh has increased significantly over the last decade, including for many relatively poorer households who now succeed in accessing private schooling and any benefits it may provide. However, this increased enrolment is not evenly distributed; far from it. Even private schools presented as 'low fee' are not within reach for those from some of the most marginalised backgrounds.

Poor parents may be 'voting with their feet' in deciding to send their children to low-fee private schools, but this must be seen in the context of dissatisfaction with the perceived quality offered within government schools. Harma's research in Uttar Pradesh (2009) reported that parents would in many circumstances continue to send their children to government schools if quality were not such an issue. Instead, private schools provide them with an opportunity to access what is perceived to be a better quality education for at least some of the children in their household. Parents ability, or indeed willingness to reallocate scarce household resources away from other areas to this private education seems to be mediated by location (which may be largely explained by availability in urban versus rural areas), gender norms, wealth, parental education levels and aspirations, as well as sibling age and gender and birth order of child. The risk is that recent trends result in an increasingly divisive education system in which private school 'choices' reinforce traditional economic, social and cultural divisions. At the same time, many government schools are becoming 'ghettoized' - attended mainly by those from the poorest, most disadvantaged and marginalised groups in society (Vasavi, 2003:76), which will serve to reinforce wider structural inequalities.

The data reported in this chapter reports the situation in Andhra Pradesh up to 2009. It does not reflect more recent policy changes, notably the Right to Education Act, 2009. In some respects then, this paper can be seen as reporting some of the challenges which the Right to

Education Act seeks to address, notably through measures to regulate all private schools and allocate 25 per cent of private school places to those from marginalised backgrounds. These provisions have the potential to work toward ensuring the private sector does open its doors to some of the poorest children. However, at the time of writing (2011) it is not clear how widely this challenging 25 per cent requirement will be acted upon, nor which children will benefit in practice. While effective monitoring and enforcement of regulation in the private sector could improve quality and access, the challenges that the government has faced in enforcement in state-run schools- for example in terms of teacher attendance (Kremer et al, 2004)- does not set a promising precedent for the success of such regulation; nor indeed for substantial improvement in quality in the public sector. As we have seen, the dynamics of school choice and trajectories, including switching schools and dropping out, is subject to a complex interplay of supply and demand factors. Unless there is an end to the resource constraints forcing parents to make gendered school choices, or the Right To Education Act brings about changes to parental decision-making that privileges one child over another, it seems likely that these trends will play out over the coming years.

While private schooling may provide a short-term solution to the educational needs of children in India today, it is unlikely to be the best means of providing education for all children in the longer term in ways that respect equity principles, especially in the absence of strong government regulation including comprehensive public-private partnership arrangements. This is not to say that private schooling does not benefit a large number of children, although knowledge about the extent and nature of those benefits is still relatively weak and the groups of beneficiaries are still somewhat selective by gender, location and poverty level. Instead, it is important to emphasise that in so far as it is unable to offer potential benefits to all children, and especially those children who may remain outside of formal schooling or drop-out early, there is little evidence that current growth in the private school sector will make a major positive contribution to the achievement of EFA goals.

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